

WHAT IS CLAIMED IS:

1. A cam structure, comprising:
a driving cam provided on a side of a first body;
a follower cam provided on a side of a second body that cooperates with the driving cam; and
a member installed in the second body and configured to provide resistant force to the rotation of a second body,
wherein the follower cam rotates cooperatively with the rotation of the driving cam while overcoming the resilient force of the resilient member in the course of rotation of the driving cam.
2. The cam structure of claim 1, wherein the follower cam is comprised of a first plane portion and a second plane portion inclined with respect to the first plane portion, and wherein the driving cam is comprised of a plane portion and a curved surface portion.
3. The cam structure of claim 2, wherein the second plane portion of the follower cam abuts against the plane portion of the driving cam such that the follower cam and the driving cam cooperatively rotate.
4. The cam structure of claim 3, wherein the first body and the second body are respectively a display unit and a camera in a main unit rotatably coupled together in a flip-type portable terminal.

5. The cam structure of claim 4, wherein when the follower cam rotates cooperatively to the rotation of the driving cam, a direction perpendicular to the first body and a sight line of the camera are maintained substantially parallel to each other, and wherein a display in the display unit operates as a viewfinder to the camera.

6. The cam structure of claim 1, wherein when the follower cam rotates cooperatively to the rotation of the driving cam, the first body and the second body are maintained parallel to each other.

7. A portable terminal, comprising:
a flip-type phone having first and second units; and
a camera coupled to move in relation to movement of one of said units.

8. The portable terminal of claim 7, wherein the first unit has a display screen, and wherein the camera moves in relation with the first unit.

9. The portable terminal of claim 8, wherein a direction orthogonal to the surface of the display screen and a sight line of the camera are parallel to each other.

10. The portable terminal of claim 9, wherein the direction orthogonal to the surface of the display screen and the sight line of the camera are parallel to each other when the first and second units are separated by an obtuse angle.

11. The portable terminal of claim 8, comprising:
a cooperating mechanism coupled to the first and second units; and
a camera chamber recessively formed in a side of the second unit and the camera is seated therein, wherein the cooperating mechanism comprises,
an urging member configured to urge the camera to rotate in a prescribed direction about a rotation center,
a follower cam coupled to one side of the camera, and
a driving cam provided in one side of the first unit that makes the camera rotate cooperatively to the rotation of the first unit while cooperating with the follower cam to overcome the urging member.

12. The portable terminal of claim 11, wherein the driving cam is provided in a side of a hinge unit that rotates integrally with the first unit.

13. The portable terminal of claim 11, wherein the follower cam is comprised of a first plane portion and a second plane portion inclined with respect to the first plane portion, and wherein the driving cam is comprised of a plane portion and a curved surface portion,

and wherein the second plane portion of the follower cam abuts against the plane portion of the driving cam such that the follower cam and the driving cam cooperatively rotate.

14. A portable terminal, comprising:
a camera configured to provide an image of an object to a display screen; and
a cooperating mechanism configured to move the camera in relation to the display screen.

15. The portable terminal of claim 14, wherein the portable terminal has a first body and a second body rotatably coupled by a hinge unit.

16. The portable terminal of claim 15, wherein the direction orthogonal to the surface of the display screen and the sight line of the camera are parallel to each other when the first body and the second body are rotatably separated by 90 to 180 degrees.

17. The portable terminal of claim 14, wherein the cooperating mechanism makes the direction orthogonal to the surface of the display screen and the sight line of the camera parallel to each other.

18. The portable terminal of claim 14, wherein the cooperating mechanism comprises:

an urging member configured to urge the camera to rotate in a prescribed direction about a rotation center;

a follower cam provided in one side of the camera; and

a driving cam provided in one side of the first unit that makes the camera rotate cooperatively to the rotation of the first unit while cooperating with the follower cam to overcome the resistive force of the urging member.

19. A method, comprising:

providing a camera in a flip type phone having a display in first body that is rotatably coupled to a second body; and

moving the camera in a prescribed relationship to movements of the first body.

20. The method of claim 19, wherein said moving comprises moving the camera from a position adjacent to the second body to a second position separated from the second body.

21. A portable terminal, comprising:

a main body portion;

a display portion provided with a display screen and rotatably coupled to the main body portion to be folded or unfolded with respect to the main body portion;

a camera configured to provide an image of an object to the display screen;
and

a cooperating mechanism configured to cause the camera to change its sight line in response to movement of the display portion.

22. The portable terminal of claim 21, wherein the cooperating mechanism comprises:

a resilient member that provides resilient force to make the camera to rotate in a prescribed direction about rotation center;

a follower cam provided in one side of the camera; and

a driving cam provided in one side of the display portion and configured to make the camera rotate cooperatively to the rotation of the display portion while cooperating with the follower cam to overcome the resilient force of the resilient member.

23. The portable terminal of claim 21, wherein the driving cam is provided in a side of the hinge unit that rotates integrally with the first body, and wherein in a side of the second body, a camera chamber is recessively formed, and the camera is seated therein.

24. The portable terminal of claim 21, wherein in a state that the display portion is unfolded to some degree with respect to the main body portion, the direction orthogonal to a surface of the display screen provided on the display portion and the sight line of the camera are parallel to each other.

25. The portable terminal of claim 21, wherein the cooperating mechanism moves the camera from a portion adjacent the main body portion to a portion separated from the main body portion.